

Reasons For Allowance

1. The following is an examiner's statement of reasons for allowance:
2. **Claims 15, 20-22, 26-27** are allowed.
3. The present invention is directed to an Ethernet switch with a bandwidth monitoring device for policing one or more of a plurality of packet flows where the monitoring unit includes a RAM memory with a section corresponding to each set of one or more packet flows to which the packet belongs. Each independent claim identifies the uniquely distinct features:

Regarding independent claim 15, subtract the size of the packet from a value of the bandwidth counter corresponding to the detected set of one more packet flows to obtain an adjusted value; issue a policing instruction if the adjusted value is equal to or lower than a first predetermined levels corresponding to a first set of one or more flows and a second predetermined level, different from the first predetermined level, corresponding to a second set of one or more flows; replace the value of the bandwidth counter corresponding to the detected set of one more packet flows by the adjusted value in the event that the packet is transmitted by the switch; and replenish each bandwidth counter with a predetermined value at a regular intervals; wherein the RAM memory includes control parameter indication portions for each of the sets of one or more flows, the control parameter indication portions indicating respective registers for storing the data representative of the one or more predetermined levels.

Regarding independent claim 22, subtracting the size of the packet from a value stored in the bandwidth counter corresponding to the set of one or more flows to obtain an adjusted value; issuing a policing instruction if the adjusted value is equal to or lower than to a first predetermined level corresponding to a first set of one or more flows and a second predetermined level, different from the first predetermined level, corresponding to a second set of one or more flows; if, despite any such policing instruction, the packet is transmitted, adjusting the value stored the bandwidth counter corresponding to the set of one or more flows by the size of the packet; and replenishing the each bandwidth counter with a predetermined value at regular intervals; wherein the RAM memory includes control parameter indication portions for each set of one or more flows, the control parameter indication portions indicating respective registers for storing the data representative of the predetermined levels.

The closest prior arts, Yazaki '197 discloses conventional packet transfer apparatus for identifying flow to which a packet belongs (paragraph, 0017), bandwidth monitoring device for monitoring the bandwidth of incoming packet flow (paragraph 0061).

Tuck '306 from the same field of endeavor discloses conventional method and apparatus for subtracting the packet from a token bucket counter (fig. 3, see counter element 32, paragraphs 0012-0013, 0041, 0048).

The closest prior arts either singularly or in combination fail to anticipate or render the distinct claimed features obvious.

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Dependent claims 20-21, 26-27 are allowed due to their dependency on claims 15, 22 respectively.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yazaki et al (US 2002/0093910 A1), Kyusojin et al (US 2002/0114277 A1), Masuda et al (US 2001/0007560 A1), Takase et al (US 7023799 B2) and Skirmont et al (US 6,252,848 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CANDAL ELPENORD whose telephone number is (571)270-3123. The examiner can normally be reached on Monday through Friday 7:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Bin Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Candal Elpenord/

Examiner, Art Unit 2416

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2416